



## MEMORANDUM

**To:** Traffic Study Files

**From:** Eric Bollich, P.E., PTOE  
South Austin Supervisor  
Traffic Engineering Division  
Austin Transportation Department

**Date:** July 20, 2012

**Subject:** Speed Zone Investigation

**Location:** Davis Lane – Brodie Lane to West Gate Boulevard



**Date(s) of Previous Investigation:** None

A Traffic Engineering Investigation has been conducted by the Austin Transportation Department to determine the appropriate speed limit on Davis Lane between Brodie Lane and West Gate Boulevard.

### Location Conditions

Davis Lane is a two-lane arterial street that runs in a general west-east direction between Brodie Lane and Manchaca Road. Within this half-mile study segment, Davis Lane has a generally rural cross section: 22 feet of travel way, open ditches, and limited clear zones from the edges of pavement. Vertical curves limit stopping sight distance for drivers stopping or slowing to utilize driveways along this segment. Most of the adjacent land is undeveloped or comprises large residential lots.

Figure 1 presents a map of the study area, the existing speed limit, and the proposed speed limit based on the following data and analysis.

### Speed and Volume Data

Speed and volume data were collected in April 2012 to determine the appropriate posted speed limit for Davis Lane. The 85<sup>th</sup> percentile speed is 12 mph to 15 mph over the existing posted speed.

Block Number	Street Segment	Existing Speed Limit	85% Speed		Traffic Volume
			EB	WB	
3300	From Brodie Ln to Cameron Loop	25	37	38	7,233
3100	From Cameron Loop to West Gate Blvd	25	39	40	6,012

Figure 2 presents a speed zone map summarizing the collected data.

### Crash Data

Austin Police Department's crash database was reviewed to analyze all documented crashes on the study segment within the previous two years. Three crashes were documented during this period; no discernible pattern from excessive speed is present.

Date / Time	Direction		Weather	Light	Road	Injury	Comments
	At Fault	Other					
3/9/11 7:40 AM	EB	EB	Clear	Day	Dry	Minor	Followed too closely; failure to control speed; driver inattention
10/27/11 3:00 PM	WB	N/A	Clear	Day	Dry	Minor	Faulty evasive action; unsafe speed (under limit); driver inattention
12/22/11 7:00 AM	EB	N/A	N/A	Dawn	N/A	None	Failure to control vehicle

### General Comments

In 2007, Austin City Council passed Ordinance No 20071101-013 that set speed limits to 25 mph for certain streets bounded by Davis Lane, Manchaca Road, Slaughter Lane, and Brodie Lane. A speed study was not conducted for Davis Lane in this determination; the street met criteria per Texas Transportation Code 545.356 that allows municipalities to set the speed limit to lower than 30 miles per hour.

### Recommendation

The collected 85<sup>th</sup> percentile speed data would suggest an appropriate speed limit of 35 mph or 40 mph for the study segment. However, based on analysis of other factors, it is my engineering judgment that the speed limit on Davis Lane should be 30 mph between Brodie Lane and West Gate Boulevard because of these considerations:

- Rural cross section (22 feet of travel way, open ditches, and limited clear zones)
- Vertical curves limiting stopping sight distance for drivers utilizing driveway
- The context of Davis Lane between West Gate Boulevard and Manchaca Road, which is currently posted at 30 mph and has segments of similar cross section

Speed limits on Davis Lane should be investigated again for appropriate speed limits after possible modifications to the cross section in the future.



Comments			
Roadside Development	Undeveloped	Residential	Undeveloped
Crashes (attach summary if >5)	①		
Advisory Speeds (see attached ball bank form)			
Recommended Speed Zones	<div style="display: flex; justify-content: space-between;"> <span>← 30 MPH</span> <span>→</span> </div>		
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Toward</p> <p><b>Brodie Ln.</b></p> </div> <div style="text-align: center;"> <p>Davis Ln.</p> </div> <div style="text-align: center;"> <p>Roadway</p> <p><b>Westgate Blvd.</b></p> <p>Toward</p> </div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> 38 65-70 3531 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> 37 65-70 3702 </div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> 40 55-60 2877 </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> 40 60-54 3135 </div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Cameron Loop </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Piney Creek Bend </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Westgate Blvd. </div> </div>
Recommended Speed Zones	<div style="display: flex; justify-content: space-between;"> <span>← 30 MPH</span> <span>→</span> </div>		
Advisory Speeds (see attached ball bank form)			
Crashes (attach summary if >5)	①		
Roadside Development	Commercial	Undeveloped	Residential
Comments			

85th Percentile Speed

Top Speed Measured

Number of Vehicles Checked

○ Mid Block Accident

⊙ Intersection Accident

----- Match Line

Speed Zone Investigation

(revised by JFG 2-18-03)

Davis Ln.

Scale = Not to scale

FIGURE 2: SPEED ZONE MAP